

REMARKS

Applicants respectfully request consideration of the subject application as amended herein. This Amendment is submitted in response to the Office Action mailed April 6, 2005. Claims 15-23, 27, and 29-31 are currently pending. In this Amendment, no claim has been amended.

Rejections under 35 U.S.C. § 103(a)

The Examiner has rejected claims 15-21, 23, 27, and 29-31 under 35 U.S.C. §103(a) as being unpatentable over Duthaler, et al. (U.S. Patent No. 6,312,304, hereinafter “Duthaler”). In view of Falls, et al. (WO. Patent No. 97/05556, herein after “Falls”) as previously applied and further in view of Smith. (U.S. Patent No. 5,545,291, hereinafter “Smith” associated by application in their specification).

Applicant respectfully submits that Duthaler in combination with Falls and Smith did not motivate

depositing a plurality of shaped blocks onto a flexible substrate, said flexible substrate having a plurality of recessed regions configured to receive said plurality of shaped blocks therein, each of said shaped blocks comprising a circuit element for driving a picture element; and
coupling a receiver to the plurality of blocks on the flexible substrate, the receiver to cause each of said shaped blocks to drive the picture element; and
coupling a display panel to the flexible substrate.

Patent law requires that the evidence for the motivation to combine references under 35 U.S.C. § 103 must come from either 1) within the references themselves or 2) in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. See *In re Lee*, 277 F.3d 1338, 1344 (Fed. Cir. 2002), *In re*

Thrift, 298 F.3d 1357, 1361 (Fed. Cir. 2002) and the Manual of Patent Examining Procedure section 2143.

Duthaler made no suggestion that making a flexible display can be done with blocks having driving circuit that drives a picture element and that the block is deposited in a flexible substrate, and a receiver coupled to the blocks as recited in the claims. Falls, Smith, or Duthaler also made no suggestion that the disclosed flexible display can be made as recited in the claims or as recited above. Applicant respectfully submits that the Examiner did not provide sufficient reasoning for obviousness under 35 U.S.C. § 103. The Examiner reasoned, summarily stated, that Duthaler taught a flexible display panel, that Smith taught a method of depositing blocks, and that Falls taught the use of a receiver to automate real-time information display provide reasoning that it would have been obvious to one of ordinary skill in the art at the time of the invention to combine to derive to Applicant's invention. The applicant requests a specific citing of facts to establish a prima facie case of obviousness by a preponderance of the evidence under 35 USC § 103.

The following is merely for the convenience of the Examiner. The law requires to prevent the use of hindsight an examiner "must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) (emphasis added) (Also see MPEP 2142 as well as MPEP 2145). The PTO bears the burden of proving an obviousness type rejection based on findings of fact and not based on conclusive statements. *In re Dembiczak*, 175 F.3d 994 (Fed. Cir. 1999). The patent examiner must cite sufficient facts to meet the evidentiary standard of a prima facie case of obviousness by a preponderance of the evidence under 35 USC § 103 rather than a mere

obvious to try standard. Ex parte Hillyer, 68 USPQ2d 1222, 1224 (Fed. Cir. 2003).

Adequate findings of fact can come from several sources. Dembiczak at 996. The motivation to combine reference must be found in the cited references themselves. Id.

Alternatively, the PTO may establish that one of ordinary skill in the art would have been motivated to combine the references with articulated findings of fact regarding: 1) the level of skill in the art; 2) the relationship between the fields of the cited art; and 3) the particular features of the prior art references that would motivate one of ordinary skill in applicant's particular art to select elements disclosed in references from a wholly different field. Id.

"Our [Federal circuit] case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." In re Lee, 277 F.3d 1338, 1344 (Fed. Cir. 2002). (emphasis added)

"Because the Board did not explain the specific understanding or principle within the knowledge of a skilled artisan that would motivate one with no knowledge of Rouffet's [Appellant's] invention to make the combination, this court infers that the examiner selected these references with the assistance of hindsight." Rouffet at 1359 (emphasis added) "The Board must, inter alia, show some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that an individual to combine the relevant teachings of the references." In re Thrift, 298 F.3d 1357, 1361 (Fed. Cir. 2002) (emphasis added). The Federal Circuit gives guidance that the technological motivation to combine the references should be present in the text or drawings of each reference. Id.

"Otherwise, the law infers that the examiner selected these references with the assistance of hindsight." See In re Rouffet.

The Examiner did not cite in either of the references where one skilled in the art of

processor design would find the suggestion to deposit blocks onto a flexible substrate having recessed regions to receive the blocks where the blocks comprising circuit element for driving a picture element and coupling a receiver to the blocks, for example, as recited in claim 15. Therefore, on this basis alone, Applicant respectfully submits that the Examiner has used an impressive use of hindsight for the obviousness rejection of the pending claims.

In more particular, Duthaler disclosed an assembly that has three (3) layers, a modulating layer, a pixel layer, and a circuit layer adhered together to form an electronic display. (Col. 1, lines 55-64).

The modulating layer includes a first substrate and an electro-optical material provided adjacent the first substrate. The modulating layer is capable of changing a visual state upon application of an electric field. (Col. 1, lines 57-60). In particular, the modulating layer includes substrate 12, a common electrode 16, and display media 14 which includes microcapsules 18. (Col. 3, lines 44-64). The microcapsules 18 are part of the display media 14. The substrate 12 of Duthaler does not include blocks with integrated circuit that drive picture elements as claimed in Applicant's claims 15-21, 23 and 27.

In Duthaler, the circuit layer includes a third substrate and at least one circuit element. In particular, the circuit layer includes a substrate 41, pixel electrode contacts 42, and pixel circuitry and logic 44. The circuit layer includes electronic that drives the display.

Duthaler also disclosed that the modulating layer comprises a flexible substrate. But Duthaler did not teach that blocks are deposited onto a flexible substrate as the Examiner believed. At col. 2, lines 24-27, Duthaler discussed that the "electro optical material comprises a plurality of capsules, each capsule comprising a bichromal sphere dispersed in a fluid," and that the "modulating layer comprises a flexible substrate." This discussion could have not suggested "depositing a plurality of shaped blocks onto a flexible substrate, said

flexible substrate having a plurality of recessed regions configured to receive said plurality of shaped blocks therein, each of said shaped blocks comprising a circuit element for driving a picture element” as recited in the claim 15. In Duthaler, a circuit layer drives the display as taught at col. 2, lines 33-40. “The circuit layer includes one or more of the following elements: a data line drive, a select line driver, a power supply, a sensor, a logic element, ...” Duthaler’s teaching did not include blocks deposited in a flexible substrate where the blocks have circuit element to drive a picture and a receiver coupling to the blocks.

With respect to the Examiner’s statement that Duthaler does not specifically describe a strip as having flexible substrate having a plurality of recessed regions configured to receive said plurality of shaped blocks therein. Applicant submits further that not only Duthaler did not even teach blocks that perform driving a picture element to even begin suggesting that blocks are to be received in recessed regions in the substrate.

Combining Duthaler with Falls and Smith does not derive to Applicant’s invention as claimed in claims 15-21, 12, 27, and 29-31. Falls may have taught coupling a receiver to an assembly. But, Falls did not teach coupling a receiver to a plurality of blocks that are deposited in a substrate as claimed in claim 15.

Additionally, even though Smith taught methods of depositing blocks into recessed regions configured to receive the blocks, Smith did not suggest that the blocks should be deposited into a flexible substrate and form an assembly the way Applicant’s invention did as recited in claim 15. Even if Smith taught the method of assembling a microstructure on to a substrate that is compact, low cost, efficient, reliable, and requires little maintenance as the Examiner stated, Smith did not suggest that blocks with driving circuit to be deposited in a flexible substrate and a receiver coupling to the blocks.

With respect to claim 27, Applicant submits further that not only that Duthaler did not

teach blocks, each comprising an electronic device for driving a picture element, to be deposited in a web material, Duthaler did not even teach coupling a receiver to the blocks on the web material. Figures 1, 6, 7, etc of Falls did not teach a web process where blocks are deposited to form a flexible display panel. As can be seen, for example, on page 13 of Falls, Figure 1 shows a product information system, Figure 6 shows a block diagram of the circuit of a display module, and Figure 7 shows a sectional view of a module secured to a backplane. In fact, none of the figures, or the associated discussion of Falls taught a web process that forms a flexible display panel as recited in claim 27. A web process may be used in many applications. But there is no suggestion of “a method of manufacturing a flexible display panel depositing a plurality of blocks onto a web material defined by a length 50 times greater than its width, each of said blocks comprises an electronic device for driving a picture element; and coupling a receiver to the plurality of blocks on the web material” as recited in claim 27. Therefore, since there is no suggestion to combine in Duthaler and Falls for the elements of claim 27, it could have not been obvious under Duthaler and Falls.

Therefore combining Duthaler with Smith and Falls could have not made obvious claims 15-21, 12, 27, and 29-31.

The Examiner has also rejected claims 22 under 35 U.S.C. §103(a) as being unpatentable over Duthaler. In view of Falls and Smith and further in view of Bischel, et al. (U.S. Patent No. 5,664,032, herein after “Bischel”).

The same discussion above applies here. In addition, similar to Duthaler , Smith, and Falls, Bischel did not suggest “depositing a plurality of shaped blocks onto a flexible substrate, said flexible substrate having a plurality of recessed regions configured to receive said plurality of shaped blocks therein, each of said shaped blocks comprising a circuit element for driving a picture element.” Even if Bischel taught an upconverting phosphor,

Bischel, in combination with Duthaler, Smith, and Falls could have not made obvious claim 22 for the same reasons discussed above.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Mimi Dao at (408) 720-8300.

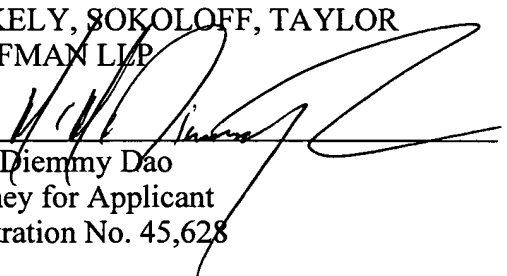
Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicant hereby requests such extension.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR
& ZAFMAN LLP

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